## APPENDIX A

### PROPOSED COUNTS

### 1. A polythioether comprising:

 $H - S - R^1 - [ -S - CH_2 - CH_2 - O - (-R^2 - O -)_m - CH_2 - CH_2 - S - R^1 - ]_n - S - H$  wherein

 $R^1$  is selected from the group consisting of  $C_{2-6}$  n-alkylene, and a  $-[(-CH_2)_p-X]_q-(-CH_2)_r$  group;

R<sup>2</sup> is selected from the group consisting of C<sub>2-6</sub> n-alkylene, and C<sub>6-8</sub> cycloalkylene;

X is selected from the group consisting of O and S;

m is an integer between 1 and 10;

p is an integer between 2 and 6;

q is an integer between 1 and 5;

r is an integer between 2 and 10; and

n is an integer between 1 and 60 selected so that the molecular weight of the polythioether is between 1,000 and 10,000 Daltons.

#### - OR -

A polythioether comprising:

$$R^4 - S - [-R^1 - S - CH_2CH_2 - (R^2)_m - S - ]_n - R^1 - S - R^4$$

wherein

 $R^1$  is a  $C_{1-10}$  alkyl,  $-(R^3Q)_pR^3$  or  $C_6$ - $C_{20}$  aryl where Q is O or S,

each  $R^3$  is independently  $C_{1\text{--}6}$  alkyl, and

p is an integer between 0 and 6;

 $R^2$  is  $C_{1-6}$  alkyloxy or  $C_{5-12}$  cycloalkyloxy,

 $R^4$  is H,  $C_{1-6}$  alkyl,  $C_{1-6}$  alkyl alcohol and  $C_{0-6}$  alkyl substituted with  $-[-CH_2CH_2(R^2)_m-]-X$ , where X is a halogen,

m is an integer between 1 and 4, and

n is an integer selected to yield a molecular weight for said polythioether of between 1000 and 10,000 Daltons.

# 2. A curable composition comprising:

40 to 80 weight percent of a polythioether polymer according to count 1, 5 to 60 weight percent of a filler and 10 weight percent of a curing agent,

- OR -

# A curable composition comprising

42 to 80 weight percent of a polythioether polymer according to count 1, and 0.3 to 15 weight percent of a light weight filler and 0.1 to 20 weight percent of a curing agent.